<u>REMARKS</u>

Reconsideration of this application is now being requested. Claims 2-20 are now in this application. Claim 1 has been canceled. Claims 2, 10, 11, 16, 17, 19 and 20 have been amended.

Claims 2 and 7 were rejected under 35 USC §103(a) as being unpatentable over Razavilar (US Publication 2003/0104831) and Nanda (US 5,842,113), further in view of Shibutani (US 2002/0193133). The office action alleges that Razavilar and Nanda teach all the subject matter of claim 2 except for "determining the first variable step by using a desired MCS (i.e. Modulation and Coding Scheme) error rate for the first MCS level." The office action further alleges that Shibutani "teaches determining the maximum data rate corresponding to the given error performance of the received signal for a specific MCS level" and, therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Shibutani with Razavilar and Nanda in order to achieve maximum data throughput in communication systems. Fig. 4 and paragraphs 50 and 64 were cited in support thereof. Applicant respectfully traverses.

Claim 2 has been rewritten into independent form, and recites the limitation that "the first variable size step is determined using a desired MCS error rate for the first MCS level." The office action implies that this limitation is being taught or suggested by Shibutani. Specifically, it implies that Shibutani's maximum data rate and a manner of determining the maximum data rate teaches or suggests, with respect to claim 2, the variable step size and the manner of determining the variable step size. Maximum data rates and variable step sizes for adjusting channel condition thresholds (nor the manner of determining them) are not the same or remotely similar and, thus, there can be no teaching or suggestion of variable step sizes (nor manner of determining variable step sizes) from maximum data rates (nor manner of determining maximum data rates). Accordingly, it is felt that claim 2 is patentable under 35 USC §103(a) as being unpatentable over Razavilar and Nanda, further in view of Shibutani.

Claim 7 depends on, and includes all the limitations of, claim 2. For the reasons discussed earlier, Shibutani does not teach or suggest the limitation of determining the first variable size step by using a desired MCS error rate for the first MCS level. Accordingly, it is felt that claim 7 is also patentable under 35 USC §103(a) over Razavilar and Nanda, further in view of Shibutani.

Claims 11, 16 and 19 were rejected under 35 USC §103 as being unpatentable over Razavilar, and further in view of Nanda. It also appears that claim 20 was also rejected under 35 USC §103 as being unpatentable over Razavilar, and further in view of Nanda. Claims 11, 16, 19 and 20 have been amended to depend on, and include all the limitations of, claim 2 which recites the limitation that "the first variable size step is determined using a desired MCS error rate for the first MCS level." The office action states, with respect to claim 2, that neither Razavilar nor Nanda teach the limitation of "determining the first variable step by using a desired MCS (i.e. Modulation and Coding Scheme) error rate for the first MCS level." However, the office action did allege that this limitation was taught by Shibutani. For the reasons discussed earlier with respect to claim 2, Shibutani does not teach or suggest this limitation of determining the first variable step by using a desired MCS error rate for the first MCS level. Accordingly, it is felt claims 11, 16, 19 and 20 are patentable under 35 USC §103(a) over Razavilar, and further in view of Nanda (and Shibutani).

Claims 12 was rejected under 35 USC §103(a) as being unpatentable over Razavilar and Nanda, further in view of Shibutani. Claim 12 depends on, and includes all the limitations of, claim 11 which now depends on claim 2. For the reasons discussed earlier with respect to claim 2, , Shibutani does not teach or suggest the limitation of determining the first variable step by using a desired MCS error rate for the first MCS level. Accordingly, it is felt that claim 12 is also patentable under 35 USC §103(a) over Razavilar and Nanda, further in view of Shibutani.

Claims 4, 10 and 13 were rejected under 35 USC §103(a) as being unpatentable over Razavilar, Nanda and Shibutani, further in view of Sindhushayana (US 2004/0202196). Claims 4 and 13 depend on, and include all the limitations of, claim 2. Claim 10, as amended, depends on, and includes all the limitations of, claim 2. For the reasons discussed earlier with respect to claim 2, Shibutani does not teach the limitation of determining the first variable step by using a desired MCS error rate for the first MCS level. Accordingly, it is felt that claims 4, 10 and 13 are also patentable under 35 USC §103(a) over Razavilar, Nanda and Shibutani, further in view of Sindhushyana.
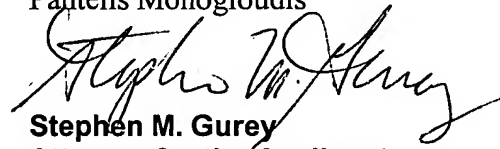
Claims 17 and 18 were rejected under 35 USC §103(a) as being unpatentable over Razavilar and Nanda, further in view of Shibutani. Claim 17 has been amended to depend on, and include all the limitations of, claim 2. For the reasons discussed earlier with respect to claim 2, , Shibutani does not teach the limitation of determining the first variable step by using a desired MCS error rate for the first MCS level. Accordingly, it is felt that claim 17 is patentable under 35 USC §103(a) over Razavilar and Nanda, further in view of Shibutani.

Claim 18 depend upon, and include all the limitations of, claim 2. For the reasons discussed earlier with respect to claim 2, , Shibutani does not teach the limitation of determining the first variable step by using a desired MCS error rate for the first MCS level. Accordingly, it is felt that claim 18 is patentable under 35 USC §103(a) over Razavilar and Nanda, further in view of Shibutani.

Claims 3, 5-6, 8-9 and 14-15 were objected to as being upon a rejected base claim but would have been allowable if rewritten into independent form. Claims 3, 5-6, 8-9 and 14-15 depend upon claim 2. For the reasons discussed above, it is felt that claim 2 is allowable. Accordingly, it is felt that claims 3, 5-6, 8-9 and 14-15 are allowable in their present form.

Respectfully submitted,

Sridhar Gollamudi
Pantelis Monogioudis

Stephen M. Gurey
Attorney for the Applicant
Reg. No. 27,336
(973)-386-8252

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Docket Administrator (Room 3J-219)
Lucent Technologies Inc.
101 Crawfords Corner Road
Holmdel, NJ 07733-3030